

REMARKS

Claims 1 and 4-36 are pending in the present application. In the Final Office Action mailed July 21, 2006, the Examiner rejected claims 7-33 under 35 U.S.C. §102(e) as being anticipated by Jaszcak et al. (USP 6,629,469). The Examiner next rejected claims 34-36 under 35 U.S.C. §103(a) as being unpatentable over Jaszcak et al.

Claims 1 and 4-6 were indicated as containing allowable subject matter. Such indication is appreciated.

In Applicant's remarks filed April 27, 2006, Applicant explained that "Jaszcak fails to teach or suggest (1) that the liver structure is a fluid chamber having an inlet and a plurality of outlets, (2) that the liver structure has a plurality of tubes connected thereto, or (3) that each tube is connected to the liver structure and has an inlet fluidly connected to an outlet of the liver structure." *Response, Apr. 27, 2006, p. 10*. In response, the Examiner stated that the "Examiner would like to point out that the disclosed subject matter in method, apparatus, and computer program on a computer medium controlling the fluid phantom emulates cardiac function not specifically directed to liver (col. 3, lines 50-60)." *Final Office Action, July 21, 2006, p. 2*. While Applicant does not disagree with the Examiner, it was the Examiner who stated that "[i]n dependent [sic] claims 7, 16, and 25 merely recites [sic] that the fluid or fluidic chamber having [sic] plurality of protrusion [sic]" and that "[t]his limitation is met ion [sic] Jaszcak et al as shown in figure 2, 34." *Office Action, Feb. 27, 2006, p. 2*. Since reference number 34 in Figure 2 corresponds to the liver phantom and since it was the Examiner who asserted the liver phantom as anticipating that called for in claims 7-33, Applicant traversed the Examiner's assertion that the liver phantom meets limitations in the claims.

Regarding the rejection of the claims, Jaszcak et al. fails to anticipate that called for in claims of 7-33. Claim 7 calls for, in part, a balloon defining a fluid chamber and having an inlet and a plurality of outlets. Referring to Fig. 4 of the provisional application (60/209,520) from which Jaszcak et al. (USP 6,629,469) claims priority because of the antedating declaration filed on May 23, 2005, antedating the filing date of Jaszcak et al. (USP 6,629,469), the left ventricular phantom 12 does not have an inlet and a plurality of outlets. The left ventricular phantom has only one opening (not numbered in the figure) through which fluid passes. As such Jaszcak et al. fails to teach a plurality of outlets.

Even assuming, arguendo, that the opening were to be considered to be both an inlet and an outlet, the left ventricular phantom still lacks a plurality of outlets as called for in claim 7. The Examiner stated that "Jaszcak et al show in figure 8 where plurality [sic] of tubes 16 and 38

configured [sic] to provide inlet and outlet to the fluid chamber where the chamber expands and contracts or increase [sic] and decrease [sic] in volume (see figure 10) due to expandability of the fluid chamber.” *Final Office Action, supra at 2*. Notwithstanding the provisional application (60/209,520) failing to disclose a ventricular volume versus time curve shown in Figure 10 of USP 6,629,469, only tube 38 is fluidly connected to the left ventricular phantom so as to “provide inlet and outlet to the fluid chamber.”

Claim 7 further calls for, in part, a plurality of tubes corresponding in number to the plurality of outlets, each tube connected to the balloon and having an inlet fluidly connected to an outlet of the balloon, wherein the plurality of tubes is configured to receive fluid exiting the fluid chamber. “Tube” 16 is a fluid delivery system numbered 14 in the provisional application. Fluid delivery system 14 “comprises tubing 28 and a pump assembly 30.” *Jaszczak, ‘520, p. 4, paragraph 2*. As illustrated in Figure 4 of *Jaszczak et al., ‘520*, front vertical portion 32 of tubing 28 includes the only volume into which the left ventricular phantom 12 outlets fluid. Neither *Jaszczak et al., ‘520*, nor *Jaszczak et al., ‘469*, disclose a plurality of tubes configured to receive fluid exiting the fluid chamber.

Accordingly, that which is called for in claim 7 is not shown, disclosed, taught, or suggested in the art of record. As such, Applicant believes claim 7, and the claims which depend therefrom, are patentably distinct over the art of record.

With regard to claim 16, a set of instructions is called for that, when executed by a computer, causes the computer to supply fluid to a phantom including an expandable fluidic chamber having a plurality of expandable tubes fluidly connected to the fluidic chamber. *Jaszczak et al.* fails to teach a plurality of expandable tubes fluidly connected to an expandable fluidic chamber. As explained above, *Jaszczak et al., ‘520*, fails to disclose a plurality of tubes fluidly connected to receive fluid exiting a fluid chamber.

In addition, *Jaszczak et al., ‘520*, states that “tubing 28 is formed of hollow, cylindrical rigid acrylic material.” *Id.* Further, “[i]t is important that the tubing 28 be rigid. . . .” *Id.* As such, the tubing connected to the left ventricular assembly is rigid. Therefore, *Jaszczak et al., ‘520*, fails to teach an expandable fluidic chamber having a plurality of expandable tubes fluidly connected to the fluidic chamber.

Accordingly, that which is called for in claim 16 is not shown, disclosed, taught, or suggested in the art of record. As such, Applicant believes claim 16, and the claims which depend therefrom, are patentably distinct over the art of record.

Claim 25 calls for, in part, connecting a balloon having an inlet and a plurality of tubular protrusions to a fluid reservoir. As explained above, the left ventricular assembly of Jaszczak et al., '520, has only a single tubular protrusion – front vertical portion 32. Jaszczak et al., '520, fails to teach an inlet and a plurality of tubular protrusions of the left ventricular assembly.

Accordingly, that which is called for in claim 25 is not shown, disclosed, taught, or suggested in the art of record. As such, Applicant believes claim 25, and the claims which depend therefrom, are patentably distinct over the art of record.

In addition to the claims discussed above, the Examiner has not identified with any particularity where the art of record teaches the subject matter of a number of the dependent claims. As an example, the Examiner has not shown where Jaszczak et al., '520, teaches the subject matter of claim 12, which calls for a supply pipe configured to transport fluid between the balloon inlet and the pump. Besides not identifying where the art of record discloses the supply pipe, the Examiner has already asserted that tube 38 of Jaszczak et al., '469, is one of a plurality of tubes as claimed in claim 7. Given that the Examiner has already asserted tube 38 as a tube corresponding to an outlet, neither of the Jaszczak et al references teach another element that can be considered or asserted as the supply pipe called for in claim 12. As such, Applicant believes that it has not been shown that the art of record additionally teaches that called for in claim 12.

The above example is only one example of many dependent claims not identified by the Examiner in the art of record. Since the Examiner failed to show where the subject matter of each claim is taught in the art of record, Applicant believes that the finality of the Office Action mailed July 21, 2006, is in error. Applicant requests that the finality, therefore, be withdrawn.

Regarding the rejection of claims 34-36, the Examiner stated that "Jaszczak et al do not specifically disclose the detailed structure of the CT system" *Final Office Action, supra at 4*. However, the Examiner failed to apply art showing a detailed structure of a CT system. To establish a *prima facie* case of obviousness, the art of record "must teach or suggest all the claim limitations." *MPEP* §2143. While the Examiner stated that "it would have been obvious to one having an ordinary skill in the art at the time the invention as made to apply any generic CT application with cardiac phantom as suggested by Jaszczak et al to achieve the claimed invention in claims 34-36" (*Final Office Action, supra at 4*), the Examiner has not applied any art teaching or suggesting all the claim limitations. That is, the Examiner failed to apply art teaching "any generic CT application" as asserted. The Examiner cannot avoid the requirement to show prior art that teaches or suggests all the claim limitations by asserting that it exists and asserting that there is a motivation to combine the non-presented prior art.

As such, the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness. Accordingly, that which is called for in claims 34-36 is not shown, disclosed, taught, or suggested in the art of record. As such, Applicant believes claims 34-36 are patentably distinct over the art of record.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1 and 4-36.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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